

PATENT ABSTRACTS OF JAPAN

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(71)Applicant : HORIUCHI HIDEO
HIRANO KATSUTOSHI

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(72)Inventor : HORIUCHI HIDEO

(54) PRODUCTION OF HAIR TONIC

(57)Abstract:

PURPOSE: To provide a hair tonic significantly high in hair tonifying effect compared to conventional hair tonics, containing, as active ingredient, minoxidil.

CONSTITUTION: 0.1-10.0g of minoxidil is mixed with 30.0-70.0g of a 95% ethanol solution followed by addition of purified water to a total of 100ml, thus obtaining the objective hair tonic. This hair tonic may be additionally incorporated with 0.1-2.0g of hyaluronic acid, 0.05-1.00g of glycyrrhizic acid dipotassium salt as an anti-inflammatory agent and 0.01-1.00g of l-menthol as a refreshing agent. This hair tonic has hair tonifying effect through the blood stream promotion of the scalp owing to blood capillary dilation developed by minoxidil.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application] This invention aims at offer of the new hair restorer which uses the minoxidil as a principal component.

[0002]

[Description of the Prior Art] As a conventional hair restorer, what uses calcium pantothenate as a principal component, the thing which uses punt TENIRU alcohol as a principal component exist.

[0003]

[Problem(s) to be Solved by the Invention] Conventionally [above-mentioned], each existing hair restorer was lacked in the conclusive factor, and there was not what can place full reliance. [including elegance] As compared with the former, the hair-fostering effectiveness makes remarkable offer of a high hair restorer possible, and, therefore, this invention solves the conventional problem.

[0004]

[Means for Solving the Problem] This invention relates to the hair restorer using the minoxidil used as a hypotensor as a principal component. And it is made for this invention to produce the hair-fostering effectiveness based on the blood-flow promotion of the scalp based on the angiotectasis which the minoxidil concerned does so.

[0005]

[Example] The minoxidil used in taking orally as a hypotensor perceives that there is terminal-hair-ization of a virilism and pubes as the side effect, and this invention aims at offer of the hair restorer which uses the minoxidil concerned as a principal component. In addition, it is thought that such a side effect was produced in order to extend the peripheral vessel of the skin.

[0006] By the way, when the minoxidil was directly added to the epidermal cell which carried out tissue culture, promoting fission of a cell was confirmed. It is also suggested that this acts on a hair mother cell directly in addition to the fact said that the blood stream of hair papilla increases and the activity of a hair mother cell prospers secondarily as a result of the minoxidil's promoting the blood flow of the scalp.

[0007] Furthermore, the minoxidil acts on the epithelium of the hair follicle, thinks that there is a direct operation which gives a morphologic change to an epidermal cell with promotion of growth, and is ****. That is, the minoxidil promotes fission and growth of the hair follicle and is considered that there is effectiveness which prevents aging of a hair mother cell.

[0008] After all, it was checked hair fostering to which the minoxidil therefore increased to external use clearly, and the regional blood flow of the skin did so hair fostering and the hair-growing effectiveness based on this, and won the existing teleangiectasia agent, and that the wool effectiveness expectation can be carried out. Offer of the new hair restorer referred to as that this invention uses the minoxidil as a principal component based on such a check fact is aimed at.

[0009] The concrete example of this invention is as follows.

Example 1 minoxidil 0.1-10.0 (g) ethanol 95% solution 30.0-70.0 (g) (it used as a solvent)
Purified water It adds so that the whole quantity may be set to 100ml.

[0010] Example 2 minoxidil 0.1-10.0 (g) hyaluronic acid 0.1-2.0 (g) (it had as a moisturizer and was)

Dipotassium glycyrrhizinate 0.05-1.00 (g) (it used as an inflammation inhibitor)

l. Menthol 0.01-1.00 (g) (it used as a refrigerant)

Ethanol 95% solution 30.0-70.0 (g) (it used as a solvent)

Purified water It adds so that the whole quantity may be set to 100ml.

[0011] The contrast trial with this invention hair restorer which has the following component, and the existing hair restorer was performed.

This invention article **: While mixing minoxidil 5.0g and 50g of ethanol 95% solutions, the whole quantity was set to 100ml with purified water.

This invention article **: Minoxidil 5.0g, 50g of ethanol 95% solutions, dipotassium glycyrrhizinate 0.5g, l. menthol While mixing 0.1g and 50g of ethanol 95% solutions, the whole quantity was set to 100ml with purified water.

Conventional article **: 5.0g of calcium pantothenates, l. menthol While mixing 0.1g and 50g of ethanol 95% solutions, the whole quantity was set to 100ml with purified water.

Conventional article **: Punt TENIRU alcoholic 5.0g, l. menthol 0.1g, ETANO While mixing 50g of - RU 95% solutions, the whole quantity is set to 100ml with purified water. **.

[0012] The test method was performed as follows. In addition, a test result is shown in Table 1 which carries out a postscript.

(1) It examined in the patch test.

(2) the scalp -- its hair was shampooed with the cleaning agent every day.

(3) The trial agent was applied twice every morning and evening.

(4) The scalp was struck and massaged in the palm after trial agent application.

(5) Regardless of sex, it tested from 15 years old to 50 years old.

[0013] Inspection and the diagnosis of effectiveness were performed as follows. The effectiveness judging was once performed by accompanying the following effectiveness criterion at two weeks.

There was remarkable effectiveness (A).

It was quite effective (B).

**** -- effective (C)

It was ineffective. (D)

[0014] The inspection item followed the 6th following term.

(1) the new development of hair -- remarkable growth is accepted (A)

A large number are admitted. (B)

It accepts. (C)

It does not accept. (D)

[0015] (2) most number of fallen hair -- there is nothing private seal ** (A)

It decreased considerably. (B)

It decreased for a while. (C)

Many (D)

[0016] (3) Truant was played and it stopped being worrisome at all. (A)

It decreased considerably. (B)

It decreased for a while. (C)

It does not decrease at all. (D)

[0017]

(4) The condition of the skin (thickness, hardness, grace, color)

An improvement is accepted in all items. (A)

An improvement is accepted in 2-3 items. (B)

An improvement is accepted in one item. (C)

An improvement is accepted in no items. (D)

[0018] (5) The form of the hair bulb of natural depilation (ten specimens)

** Several two or less of a variant depilation ball (A)

Three - 5 (B)

Six - 9 (C)

All ten are an anomaly. (D)

** Several two or less of a hair root with a tail (A)

Three - 5 (B)

Six - 9 (C)

A tail is in all ten (D).

[0019] (6) The number of cuticles (hair origin 0.1mm, ten average number of sheets)

Twelve or more sheets (A)

11 sheets (B)

Ten sheets (C)

Nine or less sheets (D)

[0020] The instrument light scope microscope used for inspection (pore and the skin are expanded and the existence of new hair, and the magnitude of pore and the quality of a condition are observed.)

Hair level gauge (measurement of a hair diameter)

Microscope (the hair bulb and a cuticle are investigated.)

[0021] Measurement size male 90-person woman Ten-person ** Total 100 persons [0022]

[Table 1]

試 験 結 果

	本発明品①		本発明品②		従来品①		従来品②	
	有効	無効	有効	無効	有効	無効	有効	無効
新生毛の発生	16	9	19	7	9	16	6	19
抜け毛の数	13	12	15	10	5	20	4	21
フケ	10	15	16	9	6	19	5	20
皮膚の状態	13	12	18	7	9	16	5	20
自然脱毛の毛球の形	11	14	14	11	10	15	6	19
キューティクルの数	12	13	15	10	5	20	5	20
合 計	75	75	97	59	44	106	31	119
%	50 %	50 %	65 %	35 %	29 %	71 %	21 %	79 %

Evaluations A, B, and C are effective. Evaluation D is [0023] which totaled as an invalid. From the above-mentioned test result, it was checked that this invention article ** and this invention article ** excel elegance ** in all elegance ** and conventionally conventionally in each store of the new development of hair, the number of fallen hair, a dandruff, the condition of the skin, the form of the hair bulb of natural depilation, and the number of cuticles. Moreover, when this invention article ** was compared with this invention article **, it was checked that the direction of this invention article ** is excellent much more.

[0024]

[Effect of the Invention] Since this was added with purified water at a rate which sets the whole quantity to 100 ml while this invention mixed 30.0-70.0g of ethanol 95% solutions to 0.1-10.0g of minoxidil, if it depends on this invention, as compared with the conventional hair restorer, offer of the remarkably excellent hair restorer will be made possible. namely, the scalp which this invention depends on using conventionally the minoxidil used as a **** hypotensor as a hair restorer, and the minoxidil concerned does so -- it changes with offer of a very effective hair restorer being secondarily achieved by the promotion nature of a blood flow, the increment nature of the blood stream of hair papilla, and the list based on an operation of the liveliness of an activity of a hair mother cell etc.

[Translation done.]